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75

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APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,968	12/31/2001		Tim Kerry Keyes	17243-00042	3148
7590 12/05/2007 John S. Beulick				EXAMINER	
Armstrong Teas			GRAHAM, CLEMENT B		
Suite 2600 One Metropolit	an So.		ART UNIT	PAPER NUMBER	
St. Louis, MO 63102				3692	
				MAIL DATE	DELIVERY MODE
				12/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
·	10/035,968	KEYES ET AL.					
Office Action Summary	Examiner	Art Unit					
•	Clement B. Graham	3692					
The MAILING DATE of this communication app		***					
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. lely filed the mailing date of this communication. (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 27 Au	gust 2007.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims		•					
4)  Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-17 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or							
Application Papers							
9) The specification is objected to by the Examiner							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119		·					
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priori application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	have been received. have been received in Application ty documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	ite					

#### **DETAILED ACTION**

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/27/2007 has been entered.
- 2. Claims 1-16 remained pending and claim 17 has been added.

# Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1, 5, 6, 11, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Claims 1, 5, 6, 11, recites the words [" **Mile stone**"]. However this language fails to distinctly claim Applicant's invention because the scope of the claim is unclear. Moreover the specification fails to clarify, the meaning of the limitation. Appropriate correction is required.

In particular, Claims 1, 5, 6, 11, recites the words [" segmenting the loan portfolio based on at least one characteristic"].

However this language fails to distinctly claim Applicant's invention because the scope of the claim is unclear because no one knows which on of the characteristics are assigned to each loan and what are the others. Moreover the specification fails to clarify, the meaning of the limitation. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al (Hereinafter Tarter U.S Pub: 20010034701in view of Greenwood et al (Hereinafter Greenwood US Pub: 2002/0152155).

As per claims 1, 17 Fox discloses a for assessing a loan portfolio comprising a plurality of non-performing loans, said method comprising the steps of: assigning at least one characteristic to each loan included within the portfolio including at least one of size of outstanding balance, nature of collateral security, lien information, historical payment performance, litigation status, and underwritten valuation; creating a business plan for each loan included within the portfolio including planned collections and timing of collections for each loan. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

segmenting the loan portfolio based on the at least one characteristic assigned to each loan.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

determining planned collections for each loan for the selected time of assessment; determining actual collections for each loan for the selected time period of assessment; populating a spreadsheet identifying the current milestone and a cumulative variance between planned collections and actual collections at the current milestone for t-he each loan; and

determining a contribution of a portfolio segment to an overall cumulative loan portfolio variance, wherein the portfolio segment includes each loan included within the portfolio having an assigned characteristic that correlates with a loan characteristic selected by a user for analysis.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

Fox fail to explicitly teach identifying a current milestone for each loan include the portfolio at a selected time of assessment from a series of predefined milestones, wherein the series of predefined milestones represent diffed within rent stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiation, scheduled for approval approved, approved delinquent, closed, closed delinquent, paid-in-full and foreclosed.

However Greenwood discloses a multi-dimensional database permits drilldowns through the organization and the ability to stratify a lending portfolio by product, risk rating, industry, collateral, original credit size, non-performing loan status vintage, and time period. Each multi-dimensional report can be viewed as a data grid or a chart, can be readily modified by the user and can be readily exported to a spreadsheet. User-defined calculations and sorting can also be applied to each report. Reports feature a variety of measures including period-end outstanding, average outstandings, total exposure, count, loan yield, fees and delinquency status.

Thus, the present process provides an automated and integrated lending process for use by a financial institution, comprising: a) a Sales Origination component; b) a loan Accounting and Processing component; c) a Portfolio Management component; and, d) a network infrastructure utilizing thin client workstations and multiple servers to access the automated lending system via a browser capable interface.(see column 2 para 0018-1119 and column 3 para0041-0046).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fox to include identifying a current milestone for each loan included within the portfolio at a selected time of assessment from a series of predefined milestones, wherein the series of predefined milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiation, scheduled for approval approved, approved delinquent, closed, closed delinquent, paid-in-full and foreclosed taught by Greenwood in order to identify the different stages an underperforming loans for assestment.

As per claims 2, Fox discloses wherein the milestone for at least one loan comprises one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed. .(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 3, Fox discloses wherein determining planned collections comprises the steps of denormalizing a business plan to create a list-oriented format for each loan and each planned payment, coding planned payments to an index of time, and determining cumulative planned collections for each loan. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 4, Fox discloses wherein determining actual collections comprises the steps of coding actual payments for each loan to an index of time and determining cumulative actual payments for each loan. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 5, Fox discloses A database for a variance tracking system, said database comprising a memory storage having data stored therein, said data comprising:

at least one characteristic associated with each of a plurality of non-performing loans included within a loan portfolio, wherein on at least one characteristic assigned to each loan includes at least one of size of outstanding balance, nature of collateral security, lien information, historical payment performance, litigation status, and underwritten valuation. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23)

a current milestone status for each of the plurality of loans, wherein the current milestone is included within a series of predefined milestones, wherein the series of a business plan for each of the plurality of loans including planned payments and timing of payments for each loan. (Note abstract and see column 3 para 0028 and

column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23) segments of the loan portfolio based on the at least one characteristic assigned to each actual payments for each loan;

indexes of time associated with each planned payment and with each actual payment; a variance between each planned payment and each actual payment; and a contribution of each portfolio segment to an overall cumulative loan portfolio variance, wherein each portfolio segment includes each loan included within the portfolio having an assigned characteristic that correlates with a loan characteristic selected by a user for analysis .(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

Fox fail to explicitly teach predefined milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed.

However Greenwood discloses a multi-dimensional database permits drilldowns through the organization and the ability to stratify a lending portfolio by product, risk rating, industry, collateral, original credit size, non-performing loan status vintage, and time period. Each multi-dimensional report can be viewed as a data grid or a chart, can be readily modified by the user and can be readily exported to a spreadsheet. User-defined calculations and sorting can also be applied to each report. Reports feature a variety of measures including period-end outstanding, average outstandings, total exposure, count, loan yield, fees and delinquency status.

Thus, the present process provides an automated and integrated lending process for use by a financial institution, comprising: a) a Sales Origination component; b) a loan Accounting and Processing component; c) a Portfolio Management component; and, d) a network infrastructure utilizing thin client workstations and multiple servers to access the automated lending system via a browser capable interface.(see column 2 para 0018-1119 and column 3 para0041-0046).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fox to include predefined milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed taught by Greenwood in order to identify the different stages an underperforming loans for assestment.

As per claims 6, Fox discloses6. (currently amended) A computer program for controlling operation of a computer to determine variance in a loan portfolio of non-performing loans, each loan having at least one characteristic assigned thereto, said computer program executable to control the computer to:

.assign at least one characteristic to each loan included within the portfolio including at least one of size of outstanding balance, nature of collateral security lien information, historical payment performan litagion status, and underwritten valuation; create a business plan for each loan included within the portfolio including planned collections and timing of collections for each loan;

segment the loan portfolio based on the at least one characteristic assigned to each loan;

determine cumulative planned collections for each loan for a selected time of assessment, determine cumulative actual collections for each loan for the selected time period of assessment, determine a cumulative variance for each loan for the selected time period of assessment based on the cumulative planned collections and cumulative actual collections; and

determine a contribution of each portfolio segment to an overall cumulative loan portfolio variance, wherein each portfolio segment includes each loan included within the portfolio having an assigned characteristic that correlates with a loan characteristic selected by a user for analysis.

.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

Page 8

Fox fail to explicitly teach associate each loan in the portfolio with one of a plurality of milestones, wherein the milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent paidin-full, and foreclosed.

However Greenwood discloses a multi-dimensional database permits drilldowns through the organization and the ability to stratify a lending portfolio by product, risk rating, industry, collateral, original credit size, non-performing loan status vintage, and time period. Each multi-dimensional report can be viewed as a data grid or a chart, can be readily modified by the user and can be readily exported to a spreadsheet. Userdefined calculations and sorting can also be applied to each report. Reports feature a variety of measures including period-end outstanding, average outstandings, total exposure, count, loan yield, fees and delinquency status.

Thus, the present process provides an automated and integrated lending process for use by a financial institution, comprising: a) a Sales Origination component; b) a loan Accounting and Processing component; c) a Portfolio Management component; and, d) a network infrastructure utilizing thin client workstations and multiple servers to access the automated lending system via a browser capable interface (see column 2 para 0018-1119 and column 3 para0041-0046).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fox to include associate each loan in the portfolio with one of a plurality of milestones, wherein the milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent paid-in-full, and foreclosed taught by Greenwood in order to identify the different stages an underperforming loans for assestment.

As per claims 7, Fox discloses a computer program according to Claim 6 further executable to control a computer to populate a spreadsheet identifying a current milestone and a cumulative variance between planned collections and actual collections

at the milestone for the loan. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 8, Fox discloses a computer program, according to Claim 6 wherein the milestone for at least one loan comprises one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 9, Fox discloses a computer program according to Claim 6 wherein to determine planned collections, said program is executable to control the computer to denormalize a business plan to create a list-oriented format for each loan and each planned payment, and coding planned payments to an index of time.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 10, Fox discloses a computer program according to Claim 6 wherein to determine actual collections, said program is executable to control the computer to code actual payments for each loan to an index of time. .(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 11, Fox discloses a variance tracker system for tracking variance in a loan portfolio of non-performing loans, said system comprising:

a database comprising a memory storage having data stored therein, said data comprising at least one characteristic assigned to each loan including at least one of size of outstanding balance, nature of collateral security, lien information, historical payment performance, litigation status, and underwritten valuation.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23) and a processor coupled to said database, said processor programmed to:

store a business plan within the database for each loan included within the portfolio including planned collections and timing of collections for each loan;

segment the loan portfolio based on the at least one characteristic assigned to each loan.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23)

determine cumulative planned collections for each loan for a selected time of assessment;

determine cumulative actual collections for each loan for the selected time period of assessment (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23)

determine a cumulative variance for each loan for the selected time period of assessment based on the cumulative planned collections and cumulative actual collections; and

determine a contribution of each portfolio segment to an overall cumulative loan portfolio variance, wherein each portfolio segment includes each loan included within the portfolio having an assigned characteristic that correlates with a loan characteristic selected by a user for analysis.(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

### Fox fail to explicitly teach

associate each loan in the portfolio with a current milestone at a selected time of assessment from a series of predefined milestones, wherein the series of predefined milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiaton scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed. However Greenwood discloses a multi-dimensional database permits drilldowns through the organization and the ability to stratify a lending portfolio by product, risk rating, industry, collateral, original credit size, non-performing loan status vintage, and time period. Each multi-dimensional report can be viewed as a data grid or a chart, can be readily modified by the user and can be readily exported to a spreadsheet. User-defined calculations and sorting can also be applied to each report. Reports feature a

variety of measures including period-end outstanding, average outstandings, total exposure, count, loan yield, fees and delinquency status.

Thus, the present process provides an automated and integrated lending process for use by a financial institution, comprising: a) a Sales Origination component; b) a loan Accounting and Processing component; c) a Portfolio Management component; and, d) a network infrastructure utilizing thin client workstations and multiple servers to access the automated lending system via a browser capable interface.(see column 2 para 0018-1119 and column 3 para0041-0046).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fox to include associate each loan in the portfolio with a current milestone at a selected time of assessment from a series of predefined milestones, wherein the series of predefined milestones represent different stages that non-performing loans experience prior to resolution including at least one of not contacted, in negotiaton scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed taught by Greenwood in order to identify the different stages an underperforming loans for assestment.

As per claims 12, Fox discloses a system according to Claim 11 wherein said processor is further programmed to populate a spreadsheet identifying a current milestone and a cumulative variance between planned collections and actual collections at the milestone for the loan. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 13, Fox discloses wherein the milestone for at least one loan comprises one of not contacted, in negotiation, scheduled for approval, approved, approved delinquent, closed, closed delinquent, paid-in-full, and foreclosed. (Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 14, Fox discloses a wherein to determine planned collections, said processor is programmed to denormalize a business plan to create a list oriented format

for each loan and each planned payment, and coding planned payments to an index of time. .(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 15, Fox discloses a system program according to Claim 11 wherein to determine actual collections, said processor is programmed to code actual payments for each loan to an index of time. .(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

As per claims 16, Fox discloses wherein the at least one characteristic assigned to each loan including real estate secured, other collateral secured, and unsecured. .(Note abstract and see column 3 para 0028 and column 4 para 0047-0048 and column 6 para 0066-0069 and column 8 claim 23).

#### Conclusion

### **RESPONSE TO ARGUMENTS**

7. In response to Applicant's argument filed 8/27/2007 has been fully considered but they are most in view of new grounds..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272-6795. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on 571-272-6702. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

FRANTZÝ POINVIL PRIMARY EXAMINER

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Application/Control Number: 10/035,968 Art Unit: 3692

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Nov 22, 2007

Page 13